Title (en)

POROUS CERAMIC AND PROCESS FOR PRODUCING THE SAME

Title (de)

PORÖSES KERAMISCHES MATERIAL UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

CERAMIQUE POREUSE ET SON PROCEDE DE FABRICATION

Publication

EP 0657403 B1 20011205 (EN)

Application

EP 94917794 A 19940608

Priority

- JP 9400941 W 19940608
- JP 16750693 A 19930614
- JP 14542594 A 19940602

Abstract (en)

[origin: US5750449A] A ceramic porous body composed principally of silicon carbide or silicon nitride which has higher strength, higher heat resistance and higher thermal shock resistance and has a large number of fine pores, and a method of producing the same. The ceramic porous body, comprised principally of silicon carbide or silicon nitride, has a pore diameter of not more than 1 mu m, with a porosity of not less than 35%, and has a flexural strength of not less than 100 MPa. The ceramic porous body is produced by using a silicon oligomer which is capable of producing silicon carbide or silicon nitride when calcined, mixing the silicon oligomer with a silicon carbide powder or silicon nitride powder, and/or other ceramic powder which has a mean particle diameter of not more than 1.0 mu m, molding the mixture into shape, then sintering the molding in a suitable atmosphere at temperatures of not less than 1200 DEG C.

IPC 1-7

C04B 38/00

IPC 8 full level

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CPC (source: EP US)

C04B 38/00 (2013.01 - EP US); **C04B 38/0022** (2013.01 - EP US); **C04B 38/0051** (2013.01 - EP US)

Cited by

FR2776287A1; US7759276B2; EP1741687A1; US7867313B2; US7648932B2; EP1741685A1; EP0684218B1; WO9948840A1; US6573208B1; US7199067B2

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